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Sage Research Methods Cases

Cultural Audits: Multiple Mixed Methods in Action

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Overview

This case study presents the cultural audit as an effective instrument for examining issues of equal opportunities within an organization. Such a tool can be both a useful social scientific technique and a powerful resource for management. The case explains how the cultural audit was devised and the process for its use in the field. Central to the case is the notion of employing multiple methods for effective research. Whilst the central instrument used was a questionnaire, this was premised upon and complemented by a wide range of other methods, including interviews, focus groups and documentary research.

The Context

The context for the development of cultural audits involved a combination of internal and external factors. As a social scientist at Lancaster University I had developed an expertise in the areas of ethnicity and gender [see Penn, 1993, 1998 and 1999]. I was involved in teaching students about issues of ethnic diversity and wider issues of equal opportunities, including how it can be assessed empirically.

Lancashire Fire & Rescue Service approached Lancaster University for assistance and the request was passed on to me. I arranged a meeting with the Assistant Chief Fire Officer in my office at the university and he outlined their problem as an organisation. The Home Office Fire Inspectorate had recently produced a Report [1999] that claimed that British fire services were 'sexist', 'racist' and 'homophobic'. The Report had been presented to the entire workforce in a series of meetings and the reaction from the workforce had been hostile, disbelieving and negative. The senior management had decided that they needed to assess the nature of attitudes to gender, ethnicity and sexuality within their organisation. They told me that they wanted to commission a

cultural audit. I pointed out that university-based research was not cheap and that we needed certain guarantees. The most important was the issue of anonymity and confidentiality. It was made clear that any information collected at the individual level would be anonymous and that such data would not be passed on to the Fire Service. This stipulation was crucial for our impartiality and central to our academic integrity. They were also asked whether they were willing to accept the results of our research irrespective of our results and conclusions. They provided such reassurances and it became clear in these early discussions that they understood the basic principles of academic research.

Cultural Audits

The origins of cultural audits as research tools were rooted in the new managerialism within the public sector that developed during the 1980s. It originated in the field of financial accounting but spread into new areas and acquired a new set of meanings. This example of conceptual inflation produced 'academic audits', 'health and safety audits' and even 'democratic audits'. All represented elements of a new regime of control that has been labelled 'coercive accountability' [see Shore & Wright, 2000]. This genealogy has meant that the dominant understanding of an audit is that it is a top down instrument of managerial control. Many see them as negative and punitive. However, there is an alternative way of looking at and conducting an audit which is positive in orientation. An audit can be a valuable way that employees in an organization can express their values and provide an antidote to the solipsism so prevalent in modern management. By this I mean the tendency of managements to believe their own rhetoric and to regard how their employees actually behave as irrational and based on 'miscommunication'. We shall see several examples of this in the detailed case study itself. The Chartered Institute of Internal Auditors

has recently extended its remit to encompass cultural audits [2014] but these remain high formalistic and have nothing to say about equal opportunities

Organisational Culture

The notion of organisational culture became central to management studies after the publication of Hofstede's [1980] seminal research on IBM. Subsequently the concept has been refined to encompass values and meaning systems within an organisation [see Needle, 2004]. Organisational culture signifies the taken-for-granted, 'common sense' ways of doing things in any particular organisation. It can be seen as the totality of cognitive interpretations of a workforce at any given time. These form a structure of cultural parameters that can [and often do] exist over time. Anyone who has changed universities for another job, for instance, will immediately understand that as a new person he/she must understand the implicit assumptions dominant within that environment in order to function successfully [see Ravasi & Schultz, 2006].

Organizational culture can be seen as a set of common assumptions that defines appropriate ways of behaving in a variety of contexts. In a more abstract sense it can be seen as the prescribed script for behaviour that new members must internalise through a process of socialisation

The Empirical Research Process & Design

1. The Previous Report

In order to conduct a cultural audit into Lancashire Fire & Rescue Service [LFRS] the first prerequisite was to read the Home Office Inspectorate's Report itself. This Report, written by people with many years direct experience of the British Fire Service, was very critical of many aspects of equality and fairness within the Fire Service.

The Report challenged the dominant 'watch culture' within the Fire Service, with its 'macho' culture that emphasized 'laddish' behaviour and 'male bonding', and which was characterized by an exclusive requirement for new recruits to 'fit in'. It concluded that the majority of staff appeared to be comfortable with this 'watch culture' and saw most of its characteristics as strengths. The Report went on further to argue that such a situation, if allowed to continue, would be highly unlikely to attract a diverse workforce and would become increasingly unacceptable to the various communities which the Fire Service serves.

The Report also found that the 'overwhelming view of uniformed staff [i.e. firefighters] ... was strong opposition to women being employed in the operational fire service' (p.23). Many reasons were adduced for this. It was often claimed that women were not capable of doing what was taken to be a 'man's job'. Some had genuine but misguided concerns about the health and welfare of women in the Fire Service over the longer term. Others questioned the motivation of women wanting to join the Fire Service: alleging that they wanted to steal husbands and/or to win major financial settlements as a result of false accusations of discrimination! Lack of physical strength and fitness to do the job were frequently cited alongside concerns that standards should not be dropped to allow women to get through the physical tests which are part of the recruitment process.

Sexual harassment of female employees within the Fire Service was noted as common and the Report claimed that incidents of sexual harassment were often rationalized by Firefighters and senior officers on the basis that women were 'not up to the job'. It further noted that 'All the women who had taken cases to employment tribunal had left the service' (p. 24). It also concluded that there

was a need for a 'major change in the culture of a service that is so strongly opposed to women being able to join the uniformed service and perform operational duties' (p. 66). Overall, the Report concluded that the Fire Service was 'institutionally sexist' (p.68).

It also stated that members of the Fire Service had a 'more balanced' opinion in relation to the right of men from ethnic minority backgrounds to join the service when compared to their general hostility towards female recruits. Nevertheless, some real concerns were noted in this area as well. In particular, the Report noted a 'a marked lack of understanding of the need for diversity in the service and the issues that need to be addressed to achieve diversity' (p.25). Acceptance of ethnic minorities, as well as women, was based upon the notion of 'fitting in', with little or no account taken of differences in the traditions, backgrounds, values, norms and preferences of those not from the dominant ethnic group. The Report concluded that there was 'a surprising and worrying ignorance of matters relating to race and culture' and that on the basis of the interpretation provided by Sir William MacPherson's Inquiry [1999] into the murder of Stephen Lawrence, the Fire Service 'might be held to be 'institutionally racist' (p.68).

The Report went on further to claim that the subject of homosexuality was an 'absolute taboo' for most members of the service and that there was little understanding or tolerance of the issues involved. Some members of the Fire Brigades Union's Gay and Lesbian Support Group reported that they had experienced 'extreme opposition' and expressed particular concern about the attitudes of middle-aged, middle-ranking officers. It concluded that the Fire Service was 'not currently capable of dealing positively with sexuality' (p.69).

Overall the HM Fire Inspectorate's Report was highly critical of the current situation in relation to equal opportunities throughout the British Fire Service and **portrayed the Fire Service as sexist, racist and homophobic**. However, the actual empirical evidence presented to support the Report itself was both anecdotal and also highly selective.

2. Literature Review

A central part of any research project involves a literature review of pertinent previous work [see Ridley, 2008 and Fink, 2013 for the best texts on how to undertake an effective literature review]. This proved to be complicated as the terrain covered research on equal opportunities, fire services themselves and on cultural audits as a method of research. Social scientific research into fire services themselves was virtually non-existent and what there was had an exclusively US focus. The area of equal opportunities on the other hand was extensive but there were no examples at that time of cultural audits into issues of gender, ethnicity and sexuality. We concluded therefore that we needed to administer a questionnaire to all employees at LFRS to assess attitudes, beliefs and practices associated with issues of equal opportunities. The reason for administering the questionnaire to the entire workforce rather than to a smaller sample were twofold. Firstly we wanted to maximise the legitimacy of the research. If everyone from the Chief Fire Officer to the cleaning staff had an opportunity to provide their responses we felt that this would avoid the assumption that only a section of the workforce were relevant to an overall assessment of the culture. Secondly, we did not want to generalise from a smaller sample. In this case the sample was the population [a technical term in statistics which means 'everyone']. Such an approach increased the cost of the research but by a very small amount. LFRS

employed 1650 employees and we secured agreement that we could distribute a questionnaire to all members of the workforce at work and that respondents would be encouraged to complete it during working hours.

However, we had no template to guide us. We needed to construct a questionnaire from first principles *ab initio*. Prior to this we needed to complete a series of related pieces of research in order to facilitate the construction of an appropriate instrument. As with all questionnaire construction this involved a range of complementary research methods. The research therefore embodied **multiple research methods** in a specific combination.

3. Preliminary Research

A: Interviews

The initial phase of the research involved interviews with senior management. These were based upon open ended, semi-structured interviews involving the research team and respondents [the best current guide to interviewing is Arksey & Knight, 2000]. Notes were taken during these interviews and transcribed immediately afterwards. These proved invaluable as a guide to the overall terrain to be examined. In particular we learned about the history of equal opportunities in the fire service and how senior management had developed procedures to monitor these. From these interviews we began to build up a picture of the social aspects of the organization and the issues surrounding equal opportunities.

B: Secondary Data

As a result of these interviews we sought [and obtained] details of these procedures and how they had been functioning over the previous five years. This included detailed documentation of their procedures for dealing with

complaints from staff about bullying and sexual harassment. We also obtained documentary evidence that provided information on the gender and ethnic characteristics of the existing workforce. There was no data collected at that time on sexuality within LFRS. Subsequently, we obtained documentary evidence on the characteristics of applicants for jobs within the fire service in the previous year, the characteristics of successful applicants and the process of attrition during the initial phase of training prior to deployment in the various roles.

The pattern of employment within the Lancashire Fire and Rescue Service certainly indicated major imbalances within the workforce. Only 174 out of 1,650 employees were female: this represented 10.5 per cent of the total. Of these, 42 worked in the Control Room where 999 calls were taken, whilst only six out of 1,013 firefighters were female. Only twelve employees overall were from ethnic minority backgrounds. There were none in the Control Room and only 0.4 per cent within the complement of firefighters.

Recruitment figures made even more stark reading. Between April 1st 1999 and 31st March 2000, there had been 1,180 applications to join the ranks of firefighters at the Lancashire Fire and Rescue Service. Of these 77 were female (75 were white females) and 47 were from ethnic minority backgrounds (including 11 Indians and 14 Pakistanis). None of the women were successful nor were any of those from ethnic minority backgrounds. The successful applicants comprised 59 white males.

C: Focus Groups

The construction of a questionnaire as a research instrument is a complex process. In order to gauge how members of LFRS thought about issues of gender, ethnicity/race and sexuality a series of focus groups were organized (see Morgan

& Kreuger, 1997 and Kreuger & Casey, 2014 for the best guides to focus groups). Focus groups have many advantages. They are particularly useful for probing group attitudes, feelings and beliefs. They are also cheaper and more efficient than individual interviews. Attendance at the focus groups took place during working hours and was voluntary. The latter principle is essential for proper focus group research. Anonymity and confidentiality were guaranteed by the research team. This is also paramount.

A series of focus groups were organized prior to the administration of the questionnaire in order to familiarize the research team with issues of equal opportunities as seen by various parts of the Lancashire Fire and Rescue Service. These took place in two Divisions, at the Service Headquarters, amongst Control Room staff and amongst a group of Retained Firefighters. These focus groups were selected at random and participants took place during working hours. The final focus group took place at the Training Centre. Unlike all the other focus group meetings which had been well organized internally, the Training Centre focus group proved extremely difficult to arrange. Nobody contacted the research team as had been arranged by the senior management at Lancashire Fire and Rescue Service and nobody met us when we arrived there. We gained a strong impression upon arrival that our presence was less than welcome. This was in marked contrast to our reception amongst all other focus groups. This would appear to be a serious cause for concern: the Training Centre was where recruits first encountered Lancashire Fire and Rescue Service in any systematic way. If our experiences were anything to go by, the Training Centre came over as an unwelcoming place to outsiders. The actual focus group provided at the Training Centre proved illuminating. The participants were helpful and friendly. However, none of them were actually involved in the main training courses provided for Lancashire Fire and Rescue Service personnel!

All focus group participants were to a degree defensive initially. Many reported that they felt “insulted” by the HM Fire Service Inspectorate’s Report and almost all felt resentful about its central claims. Indeed, this widened into a broader set of attitudes that included feelings that equal opportunities’ issues had become far too central to Lancashire Fire and Rescue Service and that recent efforts to improve the ethnic/gender balance within the workforce had gone “too far” and had generated a “climate of fear”, particularly about the limits of acceptable language whilst at work. Many participants told the research team that they were very unsure about what they could and, conversely, what they could not say in the current situation. In addition, many respondents felt that the Special Awareness Courses for women and ethnic minorities at the Training Centre were themselves intrinsically “unfair” since they excluded white males.

Focus groups can be difficult to conduct. We used a variety of formats in the research. These included having one person moderating the discussion and another making notes. In another case only one of the research team could be present and so the discussion was tape recorded. This is technically easy to organize nowadays with small, powerful recorders that can be plugged into a laptop afterwards or by using a mobile phone. The numbers in the focus groups varied from 6 to 14. The largest focus group was hard to moderate and a number of 6 to 8 is optimum [see Morgan & Kreuger, 1997 and Kreuger & Casey, 2014].

The central advantage of these focus groups was that it helped the research team understand the issues of equal opportunities as perceived by the workforce itself. They also provided an insight into the everyday language used to discuss equal opportunities. Indeed, it provided a route into the wider language of the organization. Every organization has a set of codes to describe that organization that can be obscure to outsiders. In my own earlier research I

had encountered this in several pieces of research I had conducted. The first involved participant observation amongst telephone maintenance technicians [see Penn, 1991]. The language that they used to describe *British Telecom* and their jobs was opaque to put it mildly. Part of any successful fieldwork is 'learning the language of descriptions' [see Garfinkel, 1967]. I experienced very similar issues when I researched the changing skills of coal miners [see Penn & Simpson, 1986]. I spent a great deal of time in discussing with miners the occupational system at the time of the research as well as in previous periods. This proved extremely complicated to achieve.

D: The Questionnaire

The questionnaire was pivotal to the cultural audit. Questionnaires are an efficient method of asking the same questions to a large number of respondents [see Oppenheim (1992) for an excellent guide to questionnaire design]. In this case the number was 1650. The questions were grounded in the previous hermeneutic probing of the world of the LFRS undertaken via interviews, focus groups and documentary evidence. The precise questions were based upon conjectures about the nature of their social and cultural world. Questionnaires can be seen as analogous to a conversation between respondent and researcher and the same protocols of politeness apply. The questionnaire was approved by the senior management and by representatives of the three trade unions that operated within the LFRS. These acted as two sets of gatekeepers for the cultural audit. The questionnaire was given to respondents to fill in during working hours and was accompanied by a letter from the Chief Fire Officer and the local trade union representatives urging them to complete it. After completion the questionnaires were placed in a sealed box [akin to a ballot box in elections] and subsequently picked up by the research team.

i. Cover Sheet

The questionnaire began with the cover sheet [See Questionnaire in Appendix A]. This is crucial to any questionnaire and is central to achieving a good response rate. The cover sheet was printed in bold and gave Lancaster University in capitals and 'Lancashire Fire and Rescue Service Cultural Audit' immediately below in the centres of the page. My personal details were written below that. At the bottom of the cover sheet was a box containing the following text:

CONFIDENTIALITY

This questionnaire is confidential and anonymous. All questionnaires will be processed and held at Lancaster University. NO information will be passed on to anyone that could allow for the possibility of identifying persons completing them.

This was very important as respondents had to trust the research team. As the local university this was facilitated by the high prestige of higher education and served to differentiate the research team from external consultancy firms. The confidentiality and anonymity clauses guarantees provided a strong ethical component to the research.

ii.Types of Questions

The questionnaire contained a range of different types of question. This is good practice as it helps engage the respondent in the process of data collection itself.

The early questions were factual ones such as gender and age:

- | | | |
|---|-------------------|--------------------------|
| 1. Are you? (<i>Please tick</i>) | (i) Male | <input type="checkbox"/> |
| | (ii) Female | <input type="checkbox"/> |
| | | |
| 2. What is your age? (<i>Please tick</i>) | (i) 16-25 years | <input type="checkbox"/> |
| | (ii) 26-35 years | <input type="checkbox"/> |
| | (iii) 36-45 years | <input type="checkbox"/> |
| | (iv) 46-55 years | <input type="checkbox"/> |
| | (v) Over 55 years | <input type="checkbox"/> |

The adjective ‘factual’ refers to the type of information sought, not the accuracy with which it is given [see Moser & Kalton, 1979, p315]. The first question concerned gender and was binary in form. Clearly the world of gender and sexuality is more complex than this but the research team judged this simple binary question as the most acceptable to respondents. The risk of probing further would have been risked alienating respondents who would have, in all likelihood, regarded such questions as highly intrusive.

The second question on age used mutually exclusive age bands rather than specific age. Generally respondents are more willing to answer such questions than to provide their precise age.

The section on Employment Details [Questions 4 and 5] proved the most controversial in terms of getting prior approval from the three trade unions

operating within the LFRS. They were very wary about questions that they felt could potentially have led to an individual being identified from their answers, despite the anonymity guaranteed. Normally it is bad practice to use acronyms in questionnaires as they are often misunderstood or unknown to respondents. However, the terms 'SO1' and 'Scale 6' were well understood within the organization.

Question 6 used a filter to inform respondents that it was for retained firefighters only. This was designed to obtain additional information on retained firefighters who work in the community and act as part-time firefighters in mainly rural areas.

Questions 8 and 9 ['How did you originally find out about joining the LFRS' and 'if you had a job before joining LFRS, please give brief details below'] were both open-ended. This was because the research team were unsure how to provide a fixed set of categories [boxes] for the question. It is generally good practice to use closed questions where the potential outcomes are clear-cut [such as Question 11 'Please indicate the HIGHEST level of educational qualifications you hold...'] but to use open-ended questions where these choices are indeterminate. Open-ended questions involve much more work after the questionnaires have been completed'. Each response needs to be coded and this can be very time consuming if respondents write a lot of information. Indeed, this was the main reason why the space allocated was relatively small. Coding open-ended responses is a form of content analysis [see Weber, 1990 and Krippendorff, 2012 for excellent guides to this technique].

The question on 'highest educational qualifications' had four options, with the fourth being 'other'. This is a standard device in questionnaire construction and the space below allowed respondents to provide answers not covered by these

three boxes. These could include respondents educated outside England and Wales.

The questionnaire also included a wide range of questions designed to probe respondents' attitudes, beliefs and values about gender, ethnicity/race and sexuality. These involved eight questions [Q12-14, Q19-20 and Q22-24] on these topics where respondents were asked to evaluate a statement from 'strongly agree' through to 'strongly disagree'. Such questions are standard in social science practice and are known as Likert items. Question 13, for example, asked for opinions on the statement 'women can handle job pressures as well as men'. Several questions were truncated in form and simply asked whether respondents agreed or disagreed with a statement [Q21 and Q29-35]. Question 21 asked if 'it is better for everyone in organizations like LFRS if homosexuals keep their sexuality a secret'. The choices were 'agree' or 'disagree'. There were two main reasons for adopting such a simpler format. The first was to reduce the length of the questionnaire to make it easier for respondents to complete. The second was that we wanted respondents to make a binary choice. Other questions sought attitudes to whether certain jobs were 'particularly suitable for men only, women only or both men and women' [Q16].

There were also questions that had three choices for respondents [Q15, Q17-18 and Q25-28]. Question 25 asked respondents if they were 'very prejudiced against people of other races', 'a little prejudiced' or 'not prejudiced at all'. Several questions were open-ended [Q36 and Q37]. These are an important resource as part of a cultural audit but need to be limited as their analysis is very time-consuming. The prior focus groups were very influential in our choice of both questions and language used.

The questionnaire was organized thematically in terms of its sequence of questions. The successive fields were Personal Details, Employment Details, Education, Gender, Sexuality, Ethnicity/Race and specific LFRS Issues. The earlier sections sought answers to questions whereby the research team could ascertain the background of respondents in areas such as gender, type of job, level of educational attainment. These generated a set of 'explanatory' variables. Subsequent sections produced the 'response' variables which were interpreted in terms of these 'explanatory' variables.

Clearly the questions in the questionnaire varied in format. This helped to make the instrument more attractive to respondents and helped to raise the overall response rate. This was 44.2% which was very good, especially given the sensitivity of many of the questions.

iii Triangulation

The triangulation of the results of the cultural audit with prior research at the national level was critical to the interpretation of the results. Nationally there was evidence of sexist, racist and homophobic attitudes at the time of the research. These had been presented in the annual British Social Attitudes Survey, as well as the British Household Panel Study [now renamed Understanding Society] and the International Social Survey Programme. The cultural audit replicated questions used previously by all three instruments [see Q12, Q15-16, Q17-18, Q22, Q25-26, Q28 and Q31-33]. Using these questions had two great advantages: one methodological and the other hermeneutic. The questions taken from earlier surveys had been piloted and tested before use in the field as part of large-scale national surveys. This meant that the research team could be confident in them as questions. It was also possible to compare

the responses within the LFRS with known national averages. For example, the research showed a very similar pattern of stated levels of ‘prejudice against people of other races’ as had been evident in an earlier British Social Attitudes Survey [see Table 35 in the ‘Final Report to LFRS’]. This led us to conclude that the LFRS reflected broader national patterns and that there were not pronounced levels of racist values amongst its workforce. However, behind this overall figure it was clear that women working for the LFRS, particularly those in the Control Room, were far more prejudiced. This issue was highlighted in the Final Report.

4. Data Analysis

The data from the completed questionnaires was entered into the statistical software package SPSS. This permitted the generation of tables and associated tests of statistical significance. These were the type of results that the audience for the cultural audit could understand. Clearly, more advanced statistical modelling of the data would have been possible but the tabular results were sufficient for the recipients of our final report.

Table 22 from the report illustrates the style of analysis and presentation:

Table 22: ‘Do you feel that attempts to give equal opportunities to homosexuals in Britain ...?’ by Occupational Grouping

	Firefighters	FCOs	Managers	Others
Have gone too far	51.2%	37.1%	24.4%	37.9%
Are about right	40.4%	51.6%	48.7%	53.7%
Have not gone far enough	8.3%	11.3%	26.9%	8.4%

$\chi^2 = 0.000$

The table compares attitudes to homosexuality across groups within the LFRS. Clearly, firefighters felt that ‘attempts to give equal opportunities to homosexuals in Britain’ had ‘gone too far’ to a significantly greater extent than managers or Control Room Staff [FCOs]. This was highlighted in the final report.

5. The Final Report

The cultural audit fed directly into the final report to the LFRS. This contained a short Executive Summary containing a limited number of bullet points. These were necessarily short and punchy as most readers would only read these as well as the recommendations at the end of the report. There were 14 main recommendations written in clear and simple language and these provided a catalogue of issues that senior management could then prioritise. In fact the first area to be tackled as a result of the Cultural Audit was the issue of bullying and sexual harassment. The analysis revealed that this was common and had continued to feature over the previous two years [see Tables 49 and 50 in the Final Report].

This also illustrates that a properly conducted cultural audit can be an effective resource for management. It can provide clear empirical evidence of problems within the organization that centre upon attitudes and beliefs of staff. It can also act as an effective antidote to the classic management response to any issues where they claim that “we have procedures to deal with that”. It was abundantly clear from the Cultural Audit that these procedures did not have the confidence of many members of staff.

Management were very concerned about the high levels of bullying and sexual harassment reported in the Control Room. This was investigated subsequently and several members of staff were sacked as a result of these investigations.

6. Practical Lessons Learned

The main lessons of this case study involved the importance of integrating a wide range of different research methods and techniques for the successful implementation of a cultural audit. The central method involved the construction, delivery and analysis of a questionnaire given to the entire LFRS workforce. This was based upon prior research into the issues of equal opportunities using face-to-face interviews and focus groups. It also involved examining secondary data [including national surveys] as well as conducting an extensive review of pertinent literature.

The other main lesson was that the specific cultural audit implemented within the LFRS could be contextualized and benchmarked against known national patterns of attitudes and beliefs through the process of triangulation.

7. Conclusions

The development of the cultural audit instrument outlined in this case study was innovative and exciting. In a very real sense new territory was being explored. There were no templates for the research and the cultural audit was constructed from first principles. Central to the cultural audit was a questionnaire administered to all members of the organization. This proved important both for the legitimacy of the audit and for the overall response rate. The questionnaire itself was developed on the basis of other research techniques, including interviews, focus groups and documentary research. Any successful research involves a multiplicity of related and complementary methods and techniques. The cultural audit presented in this case study provides a clear example of this central premise of all empirical research.

8. Further Developments

The initial cultural audit for Lancashire Fire and Rescue Service was well received by all parties. It received coverage in the industry's main journal *Fire* [2003] and this led to three further cultural audits in Durham, Northumbria and Tyne & Wear. The instrument was refined and the response rates improved considerably. Indeed, at Tyne and Wear the response was 80.1%. Links to these subsequent cultural audits – all of which can be found easily in Research Gate – are provided in a later section.